



City of Chicago
Richard M. Daley, Mayor

Department of Environment

Henry L. Henderson
Commissioner

Room 600A
320 North Clark Street
Chicago, Illinois 60610
(312) 744-7606 (Voice)
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July 12, 1994

Mr. Paul R. Steadman, On-Scene Coordinator
Emergency and Enforcement Response Branch
Waste Management Division
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

EPA Region 5 Records Ctr.



243420

RE: Request for Identification of ARARs for the former International Harvester Company Site Removal Action

Dear Mr. Steadman:

I am writing in response to our conversation of July 1, 1994 regarding the Navistar / International Harvester Site, and your request for information regarding City of Chicago ARARs or regulations.

The following sections of the City of Chicago Code may be applicable to the work to be performed at the site. I have attached the relevant sections of the code so you may read them to determine if they will actually pertain to activities at your site. Since I have not received the workplan for the site, there is the possibility that additional sections may apply. I would appreciate receiving a copy of the workplan for review.

Air Emissions

- 11-4-630 Atmospheric pollution prohibited
- 11-4-670 Demolition safeguards - dust and asbestos (must provide notice of intent to the Department of Environment; this can be obtained from Mr. Robert Malec)
- 11-4-770 Handling of materials susceptible to becoming windborne
- 11-4-780 Storage of materials susceptible to becoming windborne
- 11-4-990 Emission limitations

Water System Discharges

- 11-4-1030 Preliminary treatment
- 11-4-1040 Prohibited Wastes

Underground Tanks

- 15-24-280 Underground and enclosed tanks (specifications for Abandonment or Removal of Underground Tanks)





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The following regulations may pertain if any sort of on-site treatment is performed at the site, depending on what that treatment is. I have also enclosed these sections for your review:

11-4-240 Installation permit required

11-4-260 Certificate of Operation (this would be done after start-up)

11-4-610 Emission of particulate matter (emission levels would be set or approved pursuant to the issuance of an installation permit; however, the site can still be subject to violations)

You should also contact Mr. Frank Moriarty of the Fire Department (312) 744-0225. The Fire Department (functioning as the Local Emergency Planning Commission) should receive a copy of your site safety plan, and any other relevant documents pertaining to remedial activities. Also provide the Department of Environment with a copy of these documents. Additionally, you may want to contact the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) regarding any regulations pertaining to discharges to the sewer system. The Illinois Pollution Control Board may be able to provide you with further information regarding air emissions.

You had also inquired if the City had any regulations pertaining to clean-up levels for PAHs. The City does not have any levels relevant to PAH clean-up in soil.

Our department would be pleased to help you by contacting the local alderman's office, or any relevant community groups that we know of. This may be important for community relations if the work will be performed in an area visible to the general public.

I hope this letter provides you with the needed information. If you have any further questions, please do not hesitate to call me at (312) 744-5959. I would also appreciate your keeping our department updated as to the progress of this action.

Sincerely,

Ann Capriotti
Environmental Coordinator



refund of such fee to be verified by affidavit of one or more taxpayers of the city. (Prior code § 17-1.19; Amend. Coun. J. 12-11-91, p. 10978)

11-4-230 Violation—Penalties.

Any person found guilty of violating, disobeying, omitting, neglecting, refusing to comply with or resisting or opposing the enforcement of any of the provisions of this chapter, except when otherwise specifically provided, upon conviction thereof shall be punished by a fine of not less than \$100.00 nor more than \$300.00 for the first offense, and not less than \$300.00 nor more than \$500.00 for the second and each subsequent offense, in any 180-day period; provided, however, that all actions seeking the imposition of fines only shall be filed as quasi-criminal actions subject to the provisions of the Illinois Civil Practice Act (Illinois Revised Statutes 1969, Chapter 110, paragraph 1, et seq.). Repeated offenses in excess of three within any 180-day period may also be punishable as a misdemeanor by incarceration in the county jail for a term not to exceed six months under the procedure set forth in Section 1-2-1.1 of the Illinois Municipal Code (Illinois Revised Statutes 1969, Chapter 25, paragraph 1-2-1.1) and under the provisions of the Illinois Code of Criminal Procedure (Illinois Statute 1969, Chapter 38, paragraph 100-1, et seq.) in a separate proceeding. A separate and distinct offense shall be regarded as committed each day on which such person shall continue or permit any such violation or failure to comply is permitted to exist after notification thereof. In addition to such fines and penalties, the permit, or certificate of operation of such person, or of the offending property may be suspended or revoked as hereinbefore provided. (Prior code § 17-1.20)

11-4-240 Installation permit required.³

It shall be unlawful for any person to install, erect, construct, reconstruct, alter or add to, or cause to be installed, erected, constructed, reconstructed, altered or added to any fuel-burning, refuse-burning, compactor, any drain outlet or other facility for the discharge into any water or watercourse, combustion or process equipment or device, or any equipment pertaining thereto, or any stack or chimney connected therewith, within the city, excepting domestic heating plants, locomotive, steamships and internal combustion engines; or to make, or cause to be made, major repairs to any high-pressure boiler furnace or the brickwork on or about the same in said city until an application for installation and operating permits on forms supplied by the department including suitable plans and specifications of the fuel-burning, refuse-burning, compactor, combustion or process equipment or device, or high-pressure boiler furnace repair, and the structures or buildings used in connection there-

with, has been filed in duplicate by the owner, contractor or other person, or his agent, in the office of, and has been approved by, the commissioner as being so designed that the same can be managed and operated to conform to the provisions of the chapter and an installation permit issued by him for such installation, erection, construction, reconstruction, alteration, addition to or repair.

Provided, however, that maintenance or repairs or alterations which are minor in scope or do not change the capacity of such fuel-burning, refuse-burning, compactor, combustion or process equipment or device and which do not involve any changes in the method of combustion or materially affect the emission of smoke, dust, fumes or other products of combustion therefrom may be made without an installation permit; provided, further, that an emergency repair may be made prior to the application for, and the issuance of, a required installation permit in the event an emergency arises and serious consequences would result if the repair were to be deferred. When such repair is made in emergency, application for an installation permit or an operating permit therefor shall be filed in duplicate by the person or his agent in the office of the commissioner within a reasonable time after the start of such work. Each installation permit shall be posted in a conspicuous place at or near the work for which it was issued. (Prior code § 17-1.21)

11-4-250 Waste handling facilities—Permit required.

It shall be unlawful for any person to install or to construct any liquid waste handling facility, resource recovery facility, incinerator, sanitary landfill, or any facility that disposes or treats any waste in the city of Chicago without having obtained a written permit from the commissioner. No changes, additions, expansions or extensions to any such facility shall be made without having obtained a written permit from the commissioner.

Any operation at any such facility which exceeds or does not comply with the plans and specifications of the facility reviewed and approved by the commissioner pursuant to the permit application, or which violates any of the conditions imposed by the permit, or which violates any provisions of this chapter or regulations promulgated hereunder will constitute grounds for revocation of the permit. (Prior code § 17-1.22; Amend. Coun. J. 3-8-89, p. 25433)

11-4-260 Certificate of operation.

No person shall cause or allow the operation of any new emission source or new air pollution control equipment of a type for which an installation permit is required unless an application for a certificate of operation is secured. Application for a certificate of operation shall be made at such times and contain such information, data,

plans, drawings, calculations as specified in the application for the construction permit.

No certificate of operation shall be valid for more than one calendar year or until the next periodic inspection.

Violations of any of the conditions of a permit or the failure to comply with any rule or regulation of this chapter shall be grounds for revocation of the permit, as well as for other sanctions provided in the chapter.

The department of the environment shall have the owner or operator of any emission source or air pollution control equipment provide, without charge to the city, necessary holes in stacks, ducts and other safe and proper working facilities, including scaffolding, but excluding instruments and sensing devices as may be necessary for the conduct of a stack test. (Prior code § 17-1.23; Amend. Coun. J. 12-11-91, p. 10978)

11-4-270 Contents of plans and specifications.

The plans and specifications, submitted pursuant to Section 11-4-240 of the fuel-burning, combustion equipment or device other than process or process equipment shall show the type of installation, the form and dimensions of such equipment or device, more particularly the proposed boiler, furnace, fuel burner, refuse burner, stack and ducts, together with the description and dimensions of the building or part thereof in which such equipment is to be located, the amount of work and the amount of heating to be done by such equipment, including all provisions made for the purpose of securing complete combustion of the fuel or refuse to be used and the manner in which it is to be burned for the purpose of preventing emissions in excess of the limitations established by or under this chapter. Said plans and specifications shall also show the character of the fuel or refuse to be burned, the maximum quantity of the same to be burned per hour, the operating requirements and the use of such equipment; and that the room or premises in which such equipment shall be located is provided with adequate means of ventilation to provide sufficient air to complete the combustion process. Such plans and specifications shall further show the dimensions of such room in which such equipment is to be located, the location and dimensions of all stacks used in connection with or as a part of said equipment, the locations and dimensions of all stacks of any buildings or structures immediately adjoining and contiguous to the premises in question, the frequency and duration of emissions, composition of effluents and range of collector efficiency. The commissioner may require such additional data as he deems necessary for the purpose of issuing a permit for the installation or operation of any such equipment.

The plans and specifications, submitted pursuant to Section 11-4-240 of process or process equipment, shall

contain such information and data as the commissioner may deem necessary to determine the emission potential of such process or process equipment, including, but not limited to, the frequency and duration of emissions except composition of effluents and range of collector efficiency. (Prior code § 17-1.24)

11-4-280 Plan approval by registered engineer.

The plans and specifications submitted pursuant to Section 11-4-240 shall be prepared under the direction of, or approved by, a registered professional engineer and bear his seal. The commissioner shall have the power to exempt plans involving minor repairs, replacement of existing equipment, fuel conversion units or other equipment not requiring original engineering work from this provision. (Prior code § 17-1.25)

11-4-290 Conformity to plans and specifications.

Without the approval of the commissioner, no installation, erection, construction, reconstruction, alteration of, or addition to any fuel-burning, combustion or process equipment or device, or major repair to any high-pressure boiler furnace for which an installation permit has been issued, shall be made which is not in accordance with the plans, specifications and other pertinent information upon which such permit was issued. (Prior code § 17-1.26)

11-4-300 Permit issuance conditions.

Any application pursuant to Sections 11-4-240, 11-4-250, 11-4-260 and 11-4-350 shall be approved or rejected within 90 days after it is filed in the office of the commissioner. A permit for a fuel-burning, combustion or process equipment or device may be issued if (a) the plans and specifications comply with the provisions of this chapter and the rules and regulations promulgated hereunder; (b) applicable permit fees are paid; (c) the operation of the equipment or device will not result in a release of contaminants or emissions prohibited by or under this chapter. The issuance of a permit for any fuel-burning, combustion or process equipment or device may be conditioned upon operational requirements including restrictions on type of fuel or emission control devices to be utilized. (Prior code § 17-1.27; Amend. Coun. J. 3-8-89, p. 25433; 12-11-91, p. 10978)

11-4-310 Confidentiality.

(a) Any trade secret reported to or otherwise obtained by the department in connection with any examination, inspection or proceeding under this chapter shall be considered confidential:

(b) The commissioner shall adopt regulations which prescribe: (1) procedures for evaluating whether a device,

of this chapter, and stating evidence satisfactory to the commissioner that such person has taken or will take all steps necessary to provide for future compliance with the provisions of this chapter, and giving assurance to the commissioner that the acquisition and installation of the proper equipment, process, device or appliance or control equipment will be effected within a reasonable period of time, stating specifically the nature and extent thereof, and upon the finding by the commissioner upon investigation by him of the facts, that said complaint is well grounded, the commissioner is authorized to permit the operation of such plant, fuel-burning, combustion or process equipment or device or apparatus for a reasonable period of time within which period the necessary equipment, process, device, appliance, means or methods or control equipment is to be acquired and installed; provided, however, that the commissioner is empowered to grant further reasonable extensions of time upon proof of extenuating circumstances; and that an order of the commissioner denying a complaint for a period of grace or an extension of time shall be subject to review by the appeal board, as hereinabove provided. During such granted period, such persons shall not be subject to the fines and penalties hereinafter provided for the noncompliance sought to be remedied. If, however, such person wilfully fails in the time allowed to conform with applicable provision or provisions of this chapter or to comply with his assurance and agreement, he shall be subject to all applicable fines and penalties herein provided dating from the beginning of the said period or periods.

It shall be the duty of such person to notify the commissioner immediately of the completion of such installation. (Prior code § 17-1.50)

11-4-550 Episode alert program.

(a) Whenever atmospheric and pollution conditions create circumstances which may cause acute harmful health effects, the commissioner shall implement the Rules for Controlling Air Pollution Episodes as promulgated by the State of Illinois Pollution Control Board, PCB-R71-23, set forth in Chapter IV of the Rules and Regulations Governing the Control of Air Pollution, as amended from time to time.

(b) The commissioner is hereby empowered to adopt such plans as may be necessitated in cooperation with appropriate state and federal authorities for the purpose of eliminating the circumstances tending to cause acute harmful health effects as aforesaid, including, but not limited to, the implementation of an air pollution watch, an alert procedure and an emergency procedure.

(c) The commissioner is hereby empowered to request and approve acceptable episode action programs on all designated Standard Industrial Classifications group designations. Approved plans shall be kept on file and amended

as required. (Prior code § 17-1.52)

11-4-560 Environmental coordinator.

Within the department there shall be an environmental coordinator whose duties shall include, but not be limited to the following:

(a) Correlating existing lists of sites handling or storing toxic substances with any list of fires maintained by the Chicago Fire Department;

(b) Assisting the Chicago Fire Department and other local, state and federal agencies in the coordination and dissemination of information to community residents regarding preventive and precautionary measures to avoid or minimize exposure to toxic chemicals, either in case of actual or potential danger;

(c) Nothing herein contained is intended nor shall operate to supersede the authority and responsibility of the Chicago Fire Department and its respective bureaus and divisions in their duties under any current municipal ordinance or state statute, including but not limited to Chapters 2-4, 2-36, 4-120, 15-4, 15-24 and 15-28 of the Municipal Code of the City of Chicago, the Illinois Toxic Substance Act, the Chemical Safety Act or other relevant state or federal statutes. (Prior code § 17-1.53; Added, Coun. J. 1-30-87, p. 39048; Amend. Coun. J. 12-11-91, p. 10978)

11-4-570 Abandoned facilities inspection unit.

The department shall identify abandoned industrial facilities, inspect such facilities for the presence of toxic substances, and if such substances are found, notify the appropriate federal, state and local agencies responsible for removal, cleanup and security in order to facilitate safe and timely resolution of the problem. (Prior code § 17-1.54; Added, Coun. J. 1-30-87, p. 39048; Amend. 12-11-91, p. 10978)

Article II. Air Pollution Control

11-4-580 Definitions.

Definitions relating to Article II will be found in Article I, Section 11-4-120. (Prior code § 17-2.1)

11-4-590 Refuse burning.

It shall be unlawful to burn refuse, garbage or other debris in any boiler or any unit which has not been specifically designed for that purpose and for which an effective certificate of operation has not been issued. (Prior code § 17-2.2)

11-4-600 Opacity limitations—General specifications.

(a) It shall be unlawful within the city of Chicago

and within one mile of the corporate limits thereof, for any person, owner, agent, operator, firm or corporation to permit, cause, suffer or allow the emission of any smoke from any source whatever of a density, shade or capacity greater than that described as No. 1-1/2 on the Ringelmann Chart, as published by the United States Bureau of Mines, provided that the following exceptions to the provision of this section shall be permitted for fuel-burning, combustion or process equipment:

(1) For a period or periods aggregating four minutes in any 30 minutes of a density, shade or opacity equal to but not greater than that described as No. 2 on the Ringelmann Chart. Except emissions of water and water vapor shall not apply to emissions under this provision;

(2) For a period or periods aggregating four minutes in any 60 minutes of a density, shade or opacity equal to but not greater than that described as No. 3 on the Ringelmann Chart when building a new fire, banking fires and soot blowing.

(b) Determination of violations of Section 11-4-600:

(1) By qualified certified smoke reader through visual observation;

(2) By the use of a calibrated smoke evaluation device approved by the commissioner;

(3) By the use of a smoke monitor located in the stack with recording devices attachment approved by the commissioner.

(c) The commissioner may require any person, owner, agent, operator, firm or corporation whom he believes to be in violation of this Section 11-4-600 to provide a smoke monitor which shall be installed in such a manner that it will continuously monitor the density of smoke emission from the stack in question. Measurements of the smoke monitor shall be automatically transmitted to a recording device capable of maintaining a record of the data, which shall be made available to the commission upon request. (Prior code § 17-2.3)

11-4-610 Emission of particulate matter.

Subject to the provisions of Section 11-4-690 it shall be unlawful within the city of Chicago and within one mile of the corporate limits thereof for any person owning or in charge of any fuel-burning, combustion or process equipment or device, or any portable boiler, to cause, suffer or allow the emission from any such source of any particulate matter except in conformity with the limits set forth below, as follows:

(1) The limitation for all new industrial particulate emissions shall be 0.10 grams per standard cubic foot, with the exception of indirect heat exchanger emissions and incinerator emissions on industrial processes up to 100,000 pounds to 500,000 pounds per hour, 0.03 grains per standard cubic foot from over 500,000 to 750,000 pounds per hour, and 0.02 grains per standard cubic foot

from over 750,000 pounds to 1,000,000 pounds per hour. All emission limitations shall be from a stack, with the exception of indirect heat exchanger emissions and incinerator emissions. Calculations of allowable emissions for new industrial process rates up to 450 tons per hour shall be accomplished by the use of the equation $E = \text{rate of emissions in pounds per hour and } P = \text{process weight rate in tons per hour}$. Calculations of allowable emissions for industrial process rates greater than 450 tons per hour shall be accomplished by use of the equation $E = 24.8(P) \exp. 0.16$.

The limitation for all existing industrial particulate emissions shall be 0.10 grains per standard cubic foot, with the exception of indirect heat exchanger emissions and incinerator emissions or industrial processes up to 100,000 pounds per hour, 0.05 grains per standard cubic foot on industrial processes from over 100,000 pounds to 500,000 pounds per hour, 0.03 grains per standard cubic foot from over 500,000 to 750,000 pounds per hour, and 0.02 grains per standard cubic foot from over 750,000 pounds to 1,000,000 pounds per hour. All emission limitations shall be from a stack, with the exception of indirect heat exchanger emissions and incinerator emissions. Calculation of the allowable emissions for existing industrial process rates up to 30 tons per hour shall be accomplished by the use of the equation $E = 4.10(P) \exp 0.67$ where $E = \text{rate of emissions in pounds per hour and } P = \text{process weight rate in tons per hour}$ shall be accomplished by the use of the equation $E = (55.0(P) \exp 0.11 - 40.0)$. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation, the interpretation that results in the minimum value for allowable emissions shall apply. Compliance tests shall be performed and assumed at the cost to the owners. The exception is sinter processes. No person shall cause or allow the emission of particulate matter into the atmosphere from the main windbox of any sinter process to exceed 1.2 times the allowable emission rate for new industrial processes. For the breaker stack, the emissions shall not exceed the allowable emissions for new processes.

(2) The emissions from indirect heat exchangers shall be limited as follows:

No person shall cause or allow the emission of particulate matter into the atmosphere from any new or existing fuel combustion source using solid and/or liquid fuel to exceed 0.1 pounds of particulate matter per million BTU's of actual heat input in any one-hour period.

(3) A specified volume ratio or other suitable index or particulate-bearing gas shall be established in accordance with Section 11-4-030 subparagraph (11), for various pieces, types or classes of fuel-burning combustion or process equipment or devices which constitute potential sources of emission of particulate matter; provided,

however, that with respect to coal-burning combustion equipment, the basic limitations set forth in subparagraph (1) of this section shall be adjusted to a gas volume based upon 50 percent excess air.

(4) Emissions of particulate matter from all fuel-burning combustion or process equipment or devices shall not exceed emissions which would result from operations in accordance with limitations set forth in this chapter.

(5) The basic limitation on the average emission into the atmosphere of particulate matter from an incinerator shall be 0.20 grains per cubic foot of dry flue gas, corrected to 12 percent carbon dioxide. Percent carbon dioxide in flue gas used in correction equation shall be carbon dioxide resulting from combustion of refuse only.

(6) The emissions, other than water vapor, from any source that is liable to generate or evolve into particulate form through phase change or other transformation shall be deemed to be particulate matter at the emitted point. (Prior code § 17-2.4)

11-4-620 Emission testing.

The commissioner is hereby authorized to conduct or cause to be conducted any test or tests as may be necessary to determine the extent of emission process equipment or device, if and when in his judgment, there is evidence that any such equipment, process or device is exceeding any emission limitation prescribed by or under this chapter. The result of any test shall be made available to the person responsible for such property tested.

Tests shall be made in accordance with Federal Register Vol. 36, No. 247, Part II, Dec. 1971, as revised from time to time or in accordance with modified procedures as approved by this department. All tests and calculations shall be made under the direction of a competent engineer. Any test or tests to be conducted on the premises where such equipment or device is located shall be made during reasonable hours, after written notice to, and with the cooperation of, the owner or operator. Test ports are required on all process equipment and incinerators burning more than 500 pounds of refuse per hour. The cost of any test or tests and calculations shall be a debt due the city from any person responsible as owner, operator or otherwise of such fuel-burning, refuse-burning, compactor, combustion or process equipment or device in all cases when such test or tests shall have proven any emission of particulate matter in violation of any provision of this chapter. In all such cases the costs of the test shall be an unpaid debt and shall be recoverable in any court of competent jurisdiction. (Prior code § 17-2.5)

11-4-630 Atmospheric pollution prohibited.

It shall be unlawful within the city of Chicago and

within one mile of the corporate limits for any person, owner, agent, operator, firm or corporation to permit, to cause, suffer or allow the discharge, emission or release into the atmosphere from any source whatsoever of such quantities of soot, fly ash, dust, cinders, dirt and oxides, including metallic trace elements such as lead, cadmium, zinc, vanadium, beryllium, nickel, mercury, organic materials, solvents and gases which include carbon monoxide, hydrogen sulfide, nitrogen oxides, vapors, toxic or radioactive substances, waste, particulate, solid, liquid or gaseous matter or any other materials in such place, manner or concentration as to constitute atmospheric pollution. (Prior code § 17-2.6)

11-4-640 Public nuisance abatement.

Any emission of smoke, particulate matter or other matter from any single such source in excess of the limitation established in or pursuant to Sections 11-4-600, 11-4-610 and 11-4-690 shall be deemed and is hereby declared to be a public nuisance and may be summarily abated by the commissioner. Such abatement may be in addition to the administrative proceedings, fines and penalties herein provided.

The commissioner is further empowered to institute legal proceedings for the abatement or prosecution of emissions of smoke, particulate or other matter which cause injury, detriment, nuisance or annoyance to the public, or cause or has a natural tendency to cause injury or damage to business or property. Such abatement may be in addition to the administrative proceedings, fines and penalties herein provided. (Prior code § 17-2.7)

11-4-650 Remedies not exclusive.

Nothing in this chapter shall be construed to impair any cause of action or legal remedy therefor, of any person or the public for injury or damage arising from the discharge, emission or release into the atmosphere from any source whatsoever of such quantities of smoke, soot, fly ash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, vapors, odors, toxic or radioactive substances, waste, particulate, solid, liquid or gaseous matter or any other materials in such place, manner or concentration as to constitute atmospheric pollution or a common law nuisance. (Prior code § 17-2.8)

11-4-660 Compliance and instruction required.

Failure of any person as owner or agent, operator, member of any operating crew, engineman, fireman, janitor or a person in any other capacity to comply with any provision of this chapter shall be deemed a violation of this chapter and shall be subject to the fines and penalties as hereinafter provided. It shall be the duty of owners or agents of any fuel-burning combustion or

process equipment or device to instruct or cause to be instructed, the operators, operating crews, enginemen, firemen, hostlers, janitors or any other person operating such equipment or device about the proper operation of such combustion equipment or device. (Prior code § 17-2.9)

11-4-670 Demolition safeguards—Dust and asbestos.

(1) No demolition of structure shall be initiated unless all safeguards necessary and practicable to minimize the emissions of airborne dust and asbestos are taken.

(a) Notice of intention to demolish shall be made to the department of the environment 10 days prior to the commencement of demolition. Such notice shall include the following information: name of owner or wrecker, address of owner or wrecker, description of the building, structure, facility or installation, schedule starting and completion dates of demolition, method of demolition to be employed, procedures to be employed to meet the requirements of these regulations and extent of asbestos materials described in (b);

(b) Boilers, pipes and steel members insulated or fireproofed with asbestos-containing material shall be adequately wetted and stripped before any demolition or toppling is begun. This procedure shall be followed as to all other asbestos-coated surfaces. Such asbestos waste shall be immediately bagged and placed in fiber or steel drums and provisions made for disposal at a sanitary landfill;

(c) Adequate wetting to suppress the dust shall be employed before and during the demolition or toppling of any section or wall of the structure;

(d) Partial demotion is permitted without complete stripping of asbestos materials from the entire structure, provided the provisions of (a), (b) and (c) are observed for the section to be demolished;

(e) Debris shall be transported through dusttight chutes or in buckets and shall not be dropped or thrown from any floor. Any debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge;

(f) All debris shall be thoroughly wetted before loading into trucks, vehicles or other containers. During transport, such waste shall be enclosed or covered to prevent dust dispersion;

(g) Dust and debris from the demolition operations shall be removed daily from adjacent streets, sidewalks and alleys;

(h) Materials which contain asbestos physically bound to the parent material in such a manner that there will be no emission of airborne dust are exempt from the provisions of this section. Examples of such materials are wall and ceiling tile, shingles and caulking materials;

(i) Any wrecker of a demolition operation who intends to demolish a building, structure, facility or installation to which the provisions of Section 11-4-670(1)(a) would be applicable, but which has been declared by proper state or local authority to be structurally unsound and which is in danger of imminent collapse is exempt from the requirements of this paragraph, other than the handling of debris as specified in (g) and (h). (Prior code § 17-2.10; Amend. Coun. J. 12-11-91, p. 10978)

11-4-680 Spraying of asbestos prohibited—Exceptions.

It shall be unlawful within the city of Chicago, and within one mile of the corporate limits thereof, for any person, firm or corporation to cause or to permit the spraying of any substance containing asbestos, as defined in this article, in or upon any building, structure, column, frame, floor, ceiling or other portion, part or member thereof during its construction, reconstruction, alteration or repair; provided, however, that such enclosed factories, buildings or structures in which the fabrication or manufacture of products containing asbestos is carried on shall not be subject to this provision. (Prior code § 17-2.11)

11-4-690 Specific opacity limitations.

The following provisions shall be applicable to the processes and equipment hereinafter set forth in lieu of the limits upon the emission of smoke and particulate matter contained in Sections 11-4-600 and 11-4-610 hereof:

(1) Railroad Locomotives —Diesel.

(a) Immediately after starting the engine of a diesel locomotive, smoke of an appearance, density or shade in excess of No. 2 of the Ringelmann Chart shall be prohibited except that No. 3 smoke shall be allowed for a period or periods aggregating not more than four minutes during the first 15-minute period.

(b) Immediately after starting the steam generator on a diesel locomotive, smoke of an appearance, density or shade in excess of No. 2 of the Ringelmann Chart shall be prohibited except that No. 3 smoke shall be allowed for a period or periods aggregating not more than two minutes but not thereafter.

(c) After a diesel yard or switching locomotive is in service or ready for service, smoke of an appearance, density or shade in excess of No. 2 of the Ringelmann Chart shall be prohibited except that No. 3 smoke shall be allowed for a period or periods aggregating not more than one minute in any 15-minute period.

(d) After a diesel road or transfer locomotive is in service or ready for service, smoke of an appearance density or shade in excess of No. 2 of the Ringelmann Chart shall be prohibited except that No. 3 smoke shall be allowed for a period or periods aggregating not more

than one minute in any 15-minute period.

(2) Steamships and Other Vessels.

(a) When building, banking or cleaning fires or when maneuvering or ballasting, smoke of an appearance, density or shade in excess of No. 2 of the Ringelmann Chart shall be prohibited except that No. 3 smoke shall be allowed for a period or periods aggregating not more than six minutes in any 60-minute period.

(b) When building original fires at the start of seasonal operations or under emergency conditions when it is necessary to operate a boat with a fluctuating load upon the boilers to prevent danger to life or property, the foregoing restrictions or emissions shall not apply.

(c) When a steamship or other vessel is in service, except as provided to cover particular conditions stated in this section, the provisions of Section 11-4-600 hereof shall apply.

The following provisions shall be applicable to all processes and equipment in addition to the limits upon the emission of smoke and particulate matter contained in Sections 11-4-600 and 11-4-610 hereof.

(3) Sulfur Limits in Fuel.

(a) No person within the city of Chicago or within one mile of the corporate limits thereof shall cause or permit the use, or, if intended, for use in the city of Chicago, or within one mile of the corporate limits thereof, the purchase, sale, offer for sale, storage or transportation of fuel, which, as determined by the Methods of the American Society for Testing and Materials, contains more than the following percentages of sulfur by weight in the following use classifications:

(i) All new space heating equipment shall be limited to the use of fuels containing no more than 10 percent sulfur by weight.

(ii) All existing space heating equipment shall be limited to the use of fuels containing no more than 1.0 percent sulfur by weight.

(b) Upon the application of any person engaged in the operation of fuel-burning equipment, the commissioner with the approval of the appeal board may issue a certificate of operation in accordance with Section 11-4-470 of this chapter in those cases wherein the applicant shall establish that the fuel-burning equipment is operated in such a manner or is equipped with such control apparatus as to continually prevent the emission of any sulfur compound or compounds in amounts greater than those that would be emitted from the burning (in the same fuel-burning equipment without such control apparatus) or fuel containing any amount of sulfur by weight not in excess of the maximum amount permitted at the applicable time by this section.

(4) Sulfur Dioxide Concentration.

No person shall cause or permit the emission into the atmosphere from any new or existing source gases con-

taining more than 500 parts per million by volume of sulfur dioxide nor more than 15 milligrams per cubic meter of sulfuric acid or sulfur trioxide or any combination thereof; provided, however, that the foregoing limitations shall not apply to those emissions in which fuel is burned primarily to produce heat and the sulfur compound emission is due primarily to the sulfur in the fuel burned.

(4a) Emission of sulfur dioxide from sources in which fuel is burned to produce heat and the sulfur compound is due primarily to the fuel burned in accordance with the regulations promulgated by the State of Illinois Pollution Control Board, PCB-R7-123, as set forth in the Illinois Pollution Control Board Rules and Regulations, Chapter 2: Air Pollution, Part II, Rule 204: Sulfur Standards and Limitations, as amended from time to time.

(5) Hydrogen Sulfide Concentration.

No person shall cause or permit the emission into the atmosphere from any new or existing source gases containing more than 500 parts per million by volume concentrations thereof at the stack exceed a concentration of 0.01 parts per million by volume for a maximum period of one hour at any time.

(6) Methods for sampling gas to detect the presence of sulfur compounds shall be as follows:

(a) The method of measuring sulfur trioxide and sulfuric acid or any combination thereof in stack gases shall be: Particulates (H^2SO^4 —Acid Mists) Part II Federal Register Vol. 36, No. 247, Part II, Dec. 1971, Method 8 except standard Greenburg-Smith impingers shall be used in place of midjet impingers, turbidimetric method using barium chloride or other methods as approved by the department.

(b) The method of measuring hydrogen sulfide in the ambient atmosphere shall be:

(1) Lead-Acetate-Impregnated Filter Paper Procedure. Ref. Sensenbaugh, J. D. and Hemeon, E.C.L.: A Low Cost Sampler for Measurement of Low Concentration of Hydrogen Sulfide. Air Repair 4:5 (May, 1954);

(2) Methylene Blue Method. Ref. Stem. A. C., Ed —"Air Pollution, Vol. II, Second Edition" (1968), pp. 78, 79 and 80;

(3) The method of measuring hydrogen sulfide from stationary sources shall be: Method II of Federal Register Vol. 38, No. 111, June 1973, except Greenburg-Smith impingers shall be used in place of midjet impingers. Method II as above with modifications in absorbing solution (hydrogen sulfide-zinc sulfide method):

(4) Other methods as approved by this department.

(c) The method of measuring sulfur dioxide in stack gases shall be: Gaseous (SO^2 - SO^3). Federal Register Vol. 36, No. 247, Part II, Dec. 1971, Method VI except include SO^3 and Greenburg-Smith impingers shall be used in

place of midjet impingers. Other methods as approved by this department.

(d) The method of measuring sulfur trioxide and sulfuric acid or any combination thereof suspended in the ambient atmosphere shall be: Particulate H²SO⁴ Ref. Commons, B. T., Determination of Particulate Acid in Town Air, Analyst, 88, 364-67 (May, 1963). (Prior code § 17-2.12)

11-4-700 Carbon monoxide emissions.

No person shall cause or allow the emission of carbon monoxide into the atmosphere to exceed 200 pounds per minute, corrected to 50 percent excess air from petroleum and petrochemical processes, sintering plants, blast furnaces and basic oxygen furnaces. This Section 11-4-700 shall not apply to blast furnaces during abnormal movement of the furnace burden when it is necessary to relieve pressure for safety reasons, cupolas with a manufacturers rated melt rate less than five tons per hour, fuel combustion sources with an actual heat input under 10 million BTU's per hour and existing incinerators burning less than 2,000 pounds of refuse per hour. The carbon monoxide concentrations in an effluent stream shall be measured by the nondispersive infrared method or by other methods approved by the department of the environment. (Prior code § 17-2.13; Amend. Coun. J. 12-11-91, p. 10978)

11-4-710 Nitrogen oxide emissions.

The commissioner is hereby empowered to implement rules for controlling air pollution as promulgated by the state of Illinois Pollution Control Board set forth in Chapter 2, Part II, Rule 207, as amended from time to time. (Prior code § 17-2.14)

11-4-720 Fugitive particulate emissions.

No person shall cause or allow emissions of the limitations promulgated by the State of Illinois Pollution Control Board, PCB-R71-23, as set forth in the Illinois Pollution Control Board Rules and Regulations, Chapter 2: Air Pollution, Part II, Rule 203(f) Fugitive Particulate Matter, as amended from time to time. (Prior code § 17-2.15)

11-4-730 Surfacing of lots and roadways.

No person shall maintain or conduct or cause to be maintained or conducted any parking lot or automobile or truck sales or use any real property for a private roadway unless such real property is covered or treated with a surface or substance or otherwise maintained in such manner as to minimize atmospheric pollution. (Prior code § 17-2.16)

11-4-740 Open fires prohibited.

It shall be unlawful to burn paper, wood, garbage,

leaves, building construction, demolition debris or any other combustible material in open fires or in metal containers.

The commissioner shall implement the rules and regulations set forth in Chapter V, PCB-R70-11, April 14, 1972, Open Burning, as promulgated by the State of Illinois Pollution Control Board and subject to amendment from time to time. (Prior code § 17-2.17)

11-4-750 Dilution or concealment of emissions prohibited.

It shall be unlawful for any person to build, erect, install use or alter any article, machine, equipment or other contrivance that dilutes, reduces or conceals an emission without reducing the quantity of pollutants released into the atmosphere and which, in its unaltered condition, would constitute a violation of Sections 11-4-600, 11-4-610 and 11-4-630 of this chapter. (Prior code § 17-2.18; Amend. Coun. J. 12-11-91, p. 10978)

11-4-760 Smoke and gases from internal combustion engines of vehicles.

No person shall operate or cause to be operated upon any street, highway, public place, stream or waterway or private premises within the city of Chicago any internal combustion engine of any motor vehicle, boat, tug or other vehicle, while stationary or moving, which emits from any source any particulate material, smoke, obnoxious or noxious gases, fumes or vapors or any other atmospheric pollutant in violation of Sections 11-4-600, 11-4-610 and 11-4-630 of this chapter provided the foregoing shall not apply to the operation of aircraft at municipal airports.

The commissioner shall implement the rules and regulations set forth in Chapter VII, PCB-R71-23, April 14, 1972, Emission Standards and Limitations from Mobile Sources promulgated by the State of Illinois Pollution Control Board and subject to amendment from time to time. (Prior code § 17-2.19)

11-4-770 Handling of material susceptible to becoming windborne.

It shall be unlawful for any person to cause or permit the handling, loading, unloading, reloading, storing, transferring, placing, depositing, throwing, discarding, or scattering of any ashes, fly ash, cinders, slag or dust collected from any combustion process, any dust, dirt, chaff, wastepaper, trash, rubbish, waste or refuse matter of any kind or any other substance or material whatever, including sandblasting materials, likely to be scattered by the wind or susceptible to being windborne without taking reasonable precautions or measures so as to minimize atmospheric pollution. (Prior code § 17-2.20)

11-4-780 Storage of materials susceptible to becoming windborne.

Subject to the provision of Section 11-4-730 hereof, it shall be unlawful for any person to operate or maintain or cause to be operated or maintained, any building, structure or premises, open area, right-of-way, storage pile of materials, yard, vessel or vehicle or construction, sandblasting, alteration, building, demolition or wrecking operation or any other enterprise which has or involves any matter, material or substance likely to be scattered by the wind, or susceptible to being windborne without taking reasonable precautions or measures so as to minimize atmospheric pollution. (Prior code § 17-2.21)

11-4-790 Commissioner—Jurisdiction and authority.

The commissioner shall have jurisdiction and authority over the sources of any matter, material or substance likely to be scattered by the wind or susceptible to becoming airborne or a contributing factor to atmospheric pollution and shall have authority to abate windborne nuisances and to instigate prosecutions for violations of any provision of this chapter or any other chapter of this code relating to the eradication or control of matter susceptible to being windborne. For the purpose of minimizing atmospheric pollution, the commissioner shall prescribe reasonable, specific operating and maintenance practices for buildings, structures, premises, open areas, automobiles and/or truck parking and sales lots, private roadways, rights-of-way, storage piles of materials, yards, vessels, vehicles, construction, sandblasting, alteration, building, demolition or wrecking operations and any other enterprise which has or involves any matter, material or substance susceptible to being windborne and for the handling, transportation, disposition or other operation with respect to any material subject to being windborne, which practices shall be embodied in the code of recommended practices. (Prior code § 17-2.22; Amend. Coun. J. 12-11-91, p. 10978)

11-4-800 Breakdown of equipment—Notification and report.

In the event of unavoidable failure or breakdown of any fuel-burning, combustion or process equipment or device or other circumstances beyond the control of any person owning or operating such equipment, including necessary shutdowns of smoke abatement or dust collection equipment for purposes of maintenance or repair, which tends to produce unlawful emission of smoke, particulate or other matter, the owner or managing agent of such equipment or process shall immediately notify the department of such failure, breakdown or other circumstances together with all pertinent facts relating thereto and a statement of the date upon which the condition

will be rectified and shall also report to it when such defect has been removed. Immunity from prosecution under such circumstances shall be at the discretion of the commissioner. (Prior code § 17-2.23)

11-4-810 Refuse-burning equipment—Sales restrictions.

It shall be unlawful for any person to sell, offer for sale, expose for sale, exchange, deliver or install for use in the city:

(1) Any make, model or type of domestic refuse-burning equipment which has not been approved by the commissioner; or

(2) Any make, model or type of domestic refuse-burning equipment for the burning of any type of refuse other than the types for which the refuse-burning equipment has been approved by the commissioner. The delivery or transportation of any refuse-burning equipment by railroad companies and other common carriers in the course of their common carrier business shall not be deemed to be a violation of the provisions of this section. (Prior code § 17-2.24)

11-4-820 Refuse-burning equipment—Testing—Plates or tags.

Prior to approval, plans of each make, model or type of domestic refuse-burning equipment shall be submitted to the department and such equipment be subjected to such tests as may be deemed necessary to establish its air pollution potential. For this the commissioner may rely, in whole or in part, upon tests of such equipment previously conducted by nationally recognized associations.

(1) The commissioner shall list each make, model, or type of domestic refuse-burning equipment which he has approved and shall designate the approval as being limited to one of the following two categories:

Type A. Domestic burning equipment for ordinary paper or similar material only;

Type B. Domestic incinerators for burning rubbish and garbage.

(2) Any approved domestic refuse-burning equipment that is sold, offered for sale, exchanged, delivered or installed for use in the city shall bear a plate or tag in accordance with the regulations of the department which identifies the equipment and the category for which it is approved.

(3) Any person, firm or corporation whose domestic refuse-burning equipment is submitted for tests by the department must pay all reasonable expenses necessary to the attendant tests and the department shall furnish the submitter a copy of the results of such tests. (Prior code § 17-2.25)

11-4-830 Sandblasting—Permit required.

No person shall sandblast any building, structure or other architectural surface without having first been issued a permit by the commissioner of the environment. (Prior code § 17-2.26; Amend. Coun. J. 12-11-91, p. 10978)

11-4-840 Sandblasting permit—Application.

Applications for sandblasting permits shall be in such form as shall be prescribed by the commissioner of the environment. Every such application for a permit to sandblast a building, structure or architectural surface four stories in height or less shall be accompanied by a sworn statement that the applicant shall notify at least 48 hours prior to the commencement of any sandblasting all the occupants of every residential building of less than 10 dwelling units and the owners, managing agent or occupants of every residential building of 10 or more dwelling units and every nonresidential structure located within a 75-foot radius of the surface to be sandblasted. With respect to surfaces more than four stories in height, the radius of the notice shall be determined by the commissioner of the environment, giving due consideration to the public interest. Said notification shall be in writing and shall be by mail or otherwise and shall include the following information:

- (a) Address of the location to be sandblasted;
- (b) The estimated date(s) of the sandblasting operation; and
- (c) The estimated time period of the entire sandblasting operation.

The commissioner of the environment shall assure that the applicant has complied with these requirements before the permit is issued. (Prior code § 17-2.27; Amend. Coun. J. 12-11-91, p. 10978)

11-4-850 Rescheduling sandblasting operation.

In the event the applicant cannot perform the sandblasting on the estimated date(s) contained in the application or within 72 hours thereafter, the applicant shall notify the commissioner of consumer services and the owners and occupants of property at least 24 hours prior to the commencement of the rescheduled sandblasting operation. (Prior code § 17-2.28)

Article III. Boilers and Unfired Pressure Vessels*

* Enforced by buildings commissioner. See Section 11-4-020.

11-4-860 Definitions.

Definitions relating to Article III will be found in Article I, Section 11-4-120. (Prior code § 17-2A.1)

11-4-870 Boiler standards.

The material and construction of boilers shall be in

accordance with the American Society of Mechanical Engineers Rules for the Construction of Stationary Boilers, as follows:

- Section I. Power Boilers, dated 1977 or later;
- Section II. Material Specifications, dated 1977 or later.
 - Part A. Ferrous.
 - Part B. Nonferrous;
- Section III. Nuclear Vessels, dated 1977 or later;
- Section IV. Heating Boilers, dated 1977 or later;
- Section IX. Welding Qualifications, dated 1977 or later;
- Section X. Fiberglass and Reinforced Plastic Pressure Vessels, dated 1977 or later;
- Section XI. In-Service Inspection of Nuclear Reactor Coolant System, dated 1977 or later.

(Prior code § 17-2A.2)

11-4-880 Tanks and other vessels—Standards.

The material and construction of tanks and other vessels under pressure shall be in accordance with the American Society of Mechanical Engineers Rules for the Construction of Unfired Pressure Vessels, Section VIII, Pressure Vessels, Division 1 dated 1977, Division 2, dated 1977 or later. (Prior code § 17-2A.3)

11-4-890 Plans and specifications.

Before any owner or agent shall proceed with the installation or alteration of any boiler or unfired pressure vessel, he shall place on file in the department of buildings plans and specifications of the same. Upon approval of such plans and specifications, a duplicate set of which shall be left on file in said office and the payment of fees and hereinafter provided, the said department of buildings shall issue a permit for the installation or alteration of such apparatus.

If such owner or agent shall proceed with the installation of any boiler or unfired pressure vessel and shall fail to place on file with the department of buildings plans and specifications of the same and shall fail to obtain a permit for the installation of such apparatus, he shall be liable to a fine of \$25.00 for each day on which he shall have operated such installation without said permit, and each day's violation shall constitute a separate offense.

It shall be unlawful for any person to use any boiler or tank or tanks subject to pressure, other than the pressure in the city water mains, until he shall first have procured a certificate from the department of buildings that such apparatus may be safely used. If such owner, agent or person using a boiler or tank shall fail to notify the said department of buildings of his intention to make any alteration or enlargement of such boiler or tank and shall

fail to file plans and specifications for the enlargement or alteration of the same and shall proceed to make such alterations or enlargement without a permit thereof, he shall be liable to a fine of \$100.00 for each day on which he shall have prosecuted such alterations or enlargement without said permit and each day's violation shall constitute a separate offense. (Prior code § 17-2A.4; Amend. Coun. J. 9-23-89, p. 4604)

11-4-900 Inspection—Hydrostatic tests.

It shall be the duty of the buildings commissioner and his deputies to inspect all boilers, tanks, jacketed kettles, generators or other apparatus used for generating or transmitting steam for power or using steam under pressure for power or using steam under pressure for heating or steaming purposes and all other tanks, jacketed kettles and reservoirs under pressure of whatsoever kind, except as hereinafter provided as often as once a year by making a hydrostatic pressure test where such test shall be deemed necessary; provided, however, that the hydrostatic pressures used in such test shall not exceed the maximum working pressure of such apparatus by more than 50 percent and by making a careful external and internal examination. In all cases where hydrostatic pressure test is used, an internal examination of such apparatus shall afterwards be made. (Prior code § 17-2A.5; Amend. Coun. J. 9-13-89, p. 4604)

11-4-910 Drilling of vessels to determine thickness.

Any boiler, tank, jacketed kettle, generator or reservoir having been in use eight years or more and in such condition that in the opinion of the inspector the same should be drilled in order that the exact thickness and condition may be ascertained, shall be reported to the department of buildings which shall serve the owner or agent with a written notice to show cause to the said department of buildings within five days why such boiler, tank, jacketed kettle, generator or reservoir should not be drilled. If, after the owner or agent has been heard or at the end of five days, the department of buildings deems it necessary, then such boiler, tank, jacketed kettle, generator or reservoir may be drilled at points near the water line and at the bottom of the shell of the boiler or at such other points in the boiler, tank, jacketed kettle, generator or reservoir as the inspecting officer may direct and the thickness of said material shall be determined thereafter at such periodic inspection as the inspecting officer may deem necessary and the steam pressure or other pressure allowed shall be governed by such ascertained thickness and general condition of boiler, tank, jacketed kettle, generator or reservoir. The drilling and plugging of said holes shall be done at the expense of

the owner. (Prior code § 17-2A.6; Amend. Coun. J. 9-13-89, p. 4604)

11-4-920 Certificate of operation.

When an inspection of a boiler or unfired pressure vessel has been made and the same has been approved by the department of buildings, the department shall make and deliver to the person for whom the inspection was made, upon the payment of the required fees, a certificate of operation together with a general description of such apparatus. This certificate shall be framed and hung in a conspicuous place in the boiler room. (Prior code § 17-2A.7; Amend. Coun. J. 9-13-89, p. 4604)

11-4-930 Repair of vessels.

It shall be the duty of the department of buildings upon any application in writing made by any person owning, leasing or controlling the use of any boiler or unfired pressure vessel stating that the same is out of repair or has been repaired, to examine the same when so repaired; and it shall be unlawful for any person to use any boiler or unfired pressure vessel after the same has been repaired until a certificate shall have been procured from the department of buildings to the effect that such repairing has been properly done and that such boiler or unfired pressure vessel may be safely used.

No repair shall be made on a high pressure boiler until the department has examined the apparatus and issued a permit for the work to be done with the exception of minor emergency repairs that do not involve the safety of the apparatus; provided that the department of buildings shall be notified within 24 hours that such emergency repairs are made.

All repairs must be made in accordance with the applicable chapter of the *National Board of Inspectional Code* issued by the National Board of Boiler and Pressure Vessels Inspectors, dated 1977 or later, except where such chapters conflict with these rules.

All repairs involving the safety of a high pressure boiler shall be of construction in accordance with Section 1 of the ASME Code covering the particular kind of boiler or kind of work to be done.

NOTE: It is the sense of this requirement that apparatus shall be the same construction after repair is made as it was before the repair was necessary with the exception that construction can be made in accordance with the existing ASME Code.

Repair work on low pressure boilers in general shall be guided by the Rules 11.01 and 11.02 and Section 4 of the ASME Code.

All repairs involving the safety of an unfired pressure vessel shall be of construction in accordance with the Section VIII, Divisions 1 and 2 of the ASME Code.

All high pressure boilers which have reached the age

of 50 years must be subject to a full internal and external inspection of rivets, welds, butt straps, shell and/or drums. The procedure for this type of inspection will be spelled out by the department. Findings of such test will determine the allowable working pressure of the boiler at the time of said inspection. Any person engaged in or desiring to engage in the work of repairing, erecting steam boilers, steam kettles, pressure tanks, super heaters or generators or any part attached to a boiler in the city of Chicago shall obtain a license from the department of buildings to do such repair work and/or erection of the apparatus. (Prior code § 17-2A.8; Amend. Coun. J. 9-13-89, p. 4604)

11-4-940 Permit—Fee.

Upon approval of the plans and specifications by the department of buildings and the issuance of a permit for the installation of any boiler or unfired pressure vessel, the applicant for such permit shall pay a permit fee as provided in Section 11-4-130 of this code and an initial inspection fee as provided in Section 11-4-160 of this code. (Prior code § 17-2A.9; Amend. Coun. J. 9-13-89, p. 4604)

11-4-950 Periodic inspection fees.

Periodic inspection fees for boilers and unfired pressure vessels shall be paid to the city comptroller as provided in Section 11-4-170 of this code.

The provisions of this section shall not apply to single dwellings nor to multiple dwellings having less than four apartments. (Prior code § 17-2A.10)

11-4-960 Remission of inspection fees.

The department of buildings may, and is hereby directed to, remit all inspection fees charged, or that may hereafter be charged against any charitable, religious and educational institution when the boiler or other apparatus inspected is located in or upon premises used or occupied exclusively by such charitable, religious or educational institution; provided, however, that such charitable, religious or educational institution is not conducted or carried on for private gain or profit. (Prior code § 17-2A.11; Amend. Coun. J. 9-13-89, p. 4604)

11-4-970 Sales and erection requirements.

Any person manufacturing or dealing in the sale or erection of boilers, unfired pressure vessels or apparatus as defined by this chapter shall, on the sale or delivery of any such boiler, vessel, apparatus at any point or locality within the city, notify the department of buildings, giving the name of the purchaser, his street address and the street address to which such system is to be delivered. Any person selling a secondhand or used boiler or unfired pressure vessel shall before painting the same, have it inspected by the department of buildings and before

offering for sale any such boiler or unfired pressure vessel shall have in his possession a certificate issued by the said department of buildings to the effect that the said boiler or unfired pressure vessel is in such condition that it can be safely used. The fee for such inspection shall be provided in Section 11-4-180 for ASME code work. (Prior code § 17-2A.12; Amend. Coun. J. 9-13-89, p. 4604)

11-4-980 Permits for temporary boilers.

Permits are required for temporary portable boilers. The department of buildings shall grant such a permit upon review at notice. (Prior code § 17-2A.13; Amend. Coun. J. 9-13-89, p. 4604)

Article IV. Control of Emissions of Organic Substances

11-4-990 Emission limitations.

No person shall cause or allow emissions in excess of the limitations promulgated by the State of Illinois Pollution Control Board, PCB-R71-23, as set forth in the Illinois Pollution Control Board Rules and Regulations, Chapter 2: Air Pollution, Part II, Rule 205: Organic Material Emission Standards and Limitations, as amended from time to time. (Prior code § 17-2B.1)

Article V. Inedible Rendering Process

11-4-1000 Definitions.

Definitions relating to Article V will be found in Article I Section 11-4-120. (Prior code § 17-2C.1)

11-4-1010 Control of odorous effluent.

No person shall operate or use any device, machine, equipment or other contrivance for the inedible rendering of animal or marine matter unless all gases, vapors and gas-entrained effluents from these processes shall be controlled in each manner as to effectively abate any objectionable odor nuisance. In the event that the rendering processes of more than one company are contributing to the objectionable odor nuisance, abatement shall be deemed effective when the odor concentration from each process is not more than 25 odor units/cubic foot as determined by Mills adaptation of ASTM D-139-57.

An objectionable odor nuisance exists when a trained inspector, upon the receipt of a complaint from one resident or property owner in the area affected shall determine that these odors cause a nuisance outlined as follows:

Objectionable Odor Nuisance Determination. An objectionable odor nuisance exists:

On or adjacent to residential, recreational, institutional, retail sales, hotel or educational premises when odor is

detectable, in the ambient air after it is diluted with eight volumes of odor-free air as measured by the Scentometer;

On or adjacent to industrial premises when odor is detectable in the ambient air after it is diluted with 24 volumes of odor-free air as measured by the Scentometer;

On or adjacent to premises other than those above when odor is detectable in the ambient air after it is diluted with 16 volumes of odor-free air as measured by the Scentometer;

When concurrent determination made by three trained inspectors as outlined above in any given one-hour period and at intervals of not less than 15 minutes result in two positive determinations in each series of three determinations; and

Provided that any quantitative odor level measurement taken to arrive at a determination that an objectionable odor nuisance exists shall be at or beyond the property line or at or near places where people live or work. (Prior code § 17-2C.2)

Article VI. Waste Control

11-4-1020 Definitions.

Definitions relating to Article VI will be found in Article I, Section 11-4-120. (Prior code § 17-3.1)

11-4-1030 Preliminary treatment.

Whenever an industrial plant or other establishment discharges or proposes to discharge industrial wastes into any waters, sewer, drain, watercourse or natural outlet in the city of Chicago and it becomes necessary either to:

(a) Reduce or modify the objectionable characteristics or constituents of such industrial wastes to meet the limits or requirements provided for in Section 11-4-1040 hereof and to prevent pollution; or

(b) Control the quantities and rates of discharge of such industrial wastes over a 24-hour day and a seven-day week to prevent surge discharges which may place an unreasonable burden upon the sewage works of the Metropolitan Water Reclamation District.

The commissioner shall require the owner, operator or tenant of such industrial plant, or other establishment, to provide adequate preliminary treatment or handling facilities to accomplish such a result. Before any permit for the construction of preliminary treatment or handling facilities shall be issued, plans, specifications and other pertinent data or information relating to such proposed treatment or handling facilities shall be submitted by the industry for the approval of the commissioner. No permit shall be issued and no construction of such facilities shall be commenced without the prior written approval of the commissioner; and no substantial alteration or addition to or in the sewer or drain or in the preliminary treatment

or handling facilities shall be made without the prior written approval of the commissioner. (Prior code § 17-3.2; Amend. Coun. J. 12-11-91, p. 10978)

11-4-1040 Prohibited wastes.

Except as otherwise provided herein, no person shall discharge or cause to be discharged any of the following described wastes or waters into any sewer, watercourse, natural outlet or waters within or partially within or adjoining the boundaries of the city of Chicago:

(1) Maximum concentrations acceptable for discharge into the sewage system of the city of Chicago shall be as set forth by the Metropolitan Water Reclamation District ordinance titled the Sewage and Waste Control Ordinance enacted September 18, 1969, and as amended from time to time.

(2) Any discharge of wastes or water into a sewer which terminates in or is a part of the sewage system of the city of Chicago must not contain the following:

(a) Water or wastes containing more than 100 parts per million (833 pounds per million gallons) of fats, oils or greases if such water or wastes are in the opinion of the commissioner sufficient (1) to interfere with the biological processes of a sewage treatment plant, (2) interfere with proper operation of the sewage works, (3) cause obstruction to flow in sewers or (4) cause pollution as herein defined;

(b) Liquids, solids or gases which by reason of their nature or quantity are sufficient to cause fire or explosion or be injurious in any way to the structures making up the sewage works or to the operation of the sewage works;

(c) Noxious or malodorous liquids, gases or substances which whether singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for their maintenance and repair;

(d) Water or wastes containing toxic substances in quantities which are sufficient to pose a hazard to life or interfere with the biological processes of the sewage treatment works;

(e) Garbage that has not been ground or comminuted to such a degree that all particles will be carried freely in suspension under conditions normally prevailing in public sewers with no particle greater than one-half inch in dimension;

(f) Radioactive wastes unless they comply with the Atomic Energy Commission Act of 1954 (68 Stat. 919 as amended and Part 20, Subpart D —Waste Disposal, Section 20.303 of the regulations issued by the Atomic Energy Commission) or amendments thereto;

(g) Solid or viscous wastes which cause obstruction to flow in sewers or other interference with the proper operation of the sewerage system or sewage treatment works, such as grease, uncomminuted garbage, animal

guts or tissues, paunch manure, bone, hair hides, fleshings, entrails, feathers, sand, cinders, ashes, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grain, waste paper, wood, plastic, gas tar, asphalt, residues, residues from refining or processing of fuels or lubricating oil, gasoline, naphtha and similar substances;

(h) Liquids or vapors having a temperature higher than 150 degrees Fahrenheit at the point of entrance into a public sewer;

(i) Waters or waste-containing substances which are not amenable to treatment or reduction by the sewage treatment process employed or are amenable to treatment only to such degree that the water reclamation plants effluent cannot meet the requirement of other agencies having jurisdiction over discharge to the receiving waters;

(j) Excessive discoloration (such as but not limited to dye waste and vegetable tanning solutions);

(k) Mercury as Hg. Concentrations of mercury shall not exceed the standards set forth in the Illinois Pollution Control Board's Mercury Regulation No. R70-5; adopted March 31, 1971. (Prior code § 17-3.3; Amend. Coun. J. 12-11-91, p. 10978)

11-4-1050 Discharges of clean waters.

Wherever possible clean waters from air conditioning, cooling or condensing systems or from swimming pools or clean waters resulting from pretreatment of industrial wastes shall be discharged into a storm sewer, combined sewer or natural outlet approved by the commissioner. (Prior code § 17-3.4)

11-4-1060 Manholes.

Any person discharging industrial wastes into a sewer shall construct and maintain a suitable control manhole or manhole downstream from any such places or discharge to permit observation, measurement and sampling of such wastes by the commissioner or by personnel of the sanitary district as hereinafter provided. Where no manhole has been constructed or can be constructed, as in the case of some existing industries, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. (Prior code § 17-3.5)

11-4-1070 Gauging and sampling.

The commissioner shall have the right to enter and set up, on the owner's property, such devices as may be necessary to conduct a gauging and sampling operation after first giving 10 days' advance notice of his intention so to do. While performing said gauging and sampling, the commissioner, his representative or anyone performing said work in his behalf, shall observe and comply with

all safety rules applicable to the premises, established by the said owner or occupant.

The commissioner is hereby authorized to make arrangements for the Metropolitan Water Reclamation District, without incurring any legal or financial obligation upon the city of Chicago, to undertake and conduct such gauging and sampling operations, in its behalf; and to provide the necessary devices and facilities as well as the personnel and also to make the analyses of samples of such wastes, as hereinafter provided, in its own laboratories and other facilities or equipment; provided, that no such arrangements with the district shall place any personnel of the district under the control of the commissioner or cause such personnel of the district to be treated as employees of the city of Chicago for any purpose whatsoever. (Prior code § 17-3.6; Amend. Coun. J. 12-11-91, p. 10978)

11-4-1080 Sampling methods.

In order to ascertain whether or not the sewage or waste of any kind discharged by any person into any waters or sewage system conforms to the criteria or water quality standards of the department of the environment, city of Chicago, the department will use any appropriate method or device which will lead to such a determination. (Prior code § 17-3.7; Amend. Coun. J. 12-11-91, p. 10978)

11-4-1090 Analyses standards.

All analyses to determine the strength and character of industrial wastes shall be made in accordance with the latest edition of "Standard Methods for the Examination of Water and Waste Water" prepared and published jointly by the American Public Health Association, American Water Works Association and the Water Pollution Control Federation. Strength, character and quantity of wastes shall be based on any appropriate samples taken from the flow from all plant outlets discharging into a single public sewer.

The commissioner shall require the owner, operator or tenant of such industrial plant or other establishment to provide adequate preliminary treatment or handling facilities to accomplish such a result. Before any permit for the construction of preliminary treatment or handling facilities shall be issued, plans, specifications and other pertinent data or information relating to such proposed treatment or handling facilities shall be submitted to the industry for approval of the commissioner. No permit shall be issued and no construction of such facilities shall be commenced without the prior approval of the commissioner and no substantial alteration or addition to or in the sewer or drain or in the preliminary treatment or handling facilities shall be made without the prior written approval of the commissioner. (Prior code § 17-3.8)

extended to and bonded to the underside of the construction above in lieu of a separate top. 15 inches clearance shall be left around the tank for the purpose of inspection. Such tank enclosure shall be capable of withstanding the hydrostatic pressure of the contents of the tank or tanks, and shall be provided with a liquid-tight noncombustible sill raised not less than six inches above the floor. An opening which is closed by a self-closing Class A fire door shall be provided above the liquid level. Provision shall be made for adequate ventilation of such enclosures prior to entering for inspection.

Not more than one integral tank shall be installed on each piece of diesel-driven equipment. It shall be securely mounted on the engine assembly, protected against vibration, physical damage, engine heat and the heat of exhaust piping. A return line shall be provided to return surplus oil from the engine tank to supply tank. A day tank shall not exceed 550 gallons capacity and shall be at a lower level than the engine tank. Doorways of rooms containing tanks, either installed as an integral part of the engine assembly, or day tanks, shall have a noncombustible liquid-tight sill raised not less than six inches above the floor. (Prior code § 129.1-21)

15-24-280 Underground and enclosed tanks.

Construction Materials. Underground and enclosed tanks for flammable liquids shall be constructed of galvanized steel, or open hearth steel, or of wrought iron of thickness and weight not less than provided in the following table:

| Minimum Thickness of Materials | | |
|--------------------------------|------------------------|-----------------------|
| Capacity (Gallons) | U.S. Standard Gauge | Pounds Per Sq. Ft. |
| 1 to 285 | 16 | 2.50 |
| 286 to 560 | 14 | 3.125 |
| 561 to 1,100 | 12 | 4.375 |
| 1,101 to 4,000 | 7 | 7.50 |
| 4,001 to 12,000 | 1/4 in. | 10.00 |
| 12,001 to 20,000 | 5/16 in. | 12.50 |

Any tank built in accordance with Underwriters' Laboratories Standard 172 shall be acceptable.

All material used in underground and enclosed storage tanks, for which material is lighter than No. 7 U. S. Standard gauge shall be galvanized. If internal bracing is provided, tanks for the storing of Class III liquids, having a capacity of from 12,001 to 30,000 gallons, shall be built of steel plate not less than one-fourth-inch thick. All joints of tanks shall be riveted

and caulked, brazed or welded. Underwriters' Laboratories, Inc. labeled or any other nationally recognized testing laboratories approved glass-fiber reinforced plastic tanks may be used for underground storage of flammable liquids. Tanks shall be tight and sufficiently strong to bear without injury the most severe strains to which tanks are subjected. Shells of tanks shall be properly reinforced where connections are made. All connections shall be made through the top of the tank above the liquid level. Tanks and systems under pressure shall be designed for four times the maximum working pressure. All iron or steel tanks shall be coated on the outside with tar or asphaltum or heavy protective paint. All concrete tanks shall be constructed in accordance with the provisions of Chapter 13-136 of this code. Compartmented tanks shall not be permitted. Inlet openings for flammable liquid tanks inside buildings shall be piped down to four inches from the bottom of the tank unless they are equipped with a trap. Gauging openings inside of buildings shall not be permitted.

All enclosed and underground tanks when installed shall be tested to a pressure equal to the static head of the height of the vent, but not smaller than five psi. Such test shall be held for not less than 30 minutes without loss of air of more than 10 percent air pressure drop. When it is necessary to test such tank to a pressure of more than five psi, the test shall be of hydrostatic nature utilizing water. Pressure tanks shall be tested to one and one-half times their working pressure.

Covering for Metal Tanks. All flammable liquid tanks buried underground shall have the top of the tank not less than two feet below the surface of the ground except in lieu of such covering, tanks may be buried under not less than 12 inches of earth, with a cover of reinforced concrete not less than six inches in thickness provided over such tanks, which shall extend not less than one foot horizontally beyond projected limits of the tanks in all directions. All concrete work shall be in accordance with Chapter 13-136 of this code. Where tanks are liable to be displaced because of moisture in the ground, all tanks shall be securely anchored or weighted. Where tanks are located under driveways, such tanks shall not be less than three feet below the top surface of the driveway; provided, however, that if such driveways are paved with concrete not less than six inches in thickness, the total coverage above the top of the tank shall be not less than two feet.

Covering for Underwriters' Laboratories, Inc. Labeled Glass-fiber Reinforced Plastic Tanks.

Depth and Cover. Glass-fiber reinforced plastic tanks shall be set upon firm earth which has not been previously disturbed and may be set on a minimum of six inches of number 4 run gravel or sand. Glass-fiber reinforced plastic tanks shall be buried with two and one-half feet of compacted well graded granular soil, number 4 run gravel or sand, with a cover of reinforced concrete not less than six inches in thickness provided over such tanks, which shall extend not less than one foot horizontally beyond the projected limits of the tank in all directions, a minimum clearance of eighteen inches between tanks. When anchoring is required, hold down straps shall be installed. A minimum clearance of two inches between bottom end of pipe and tank bottom shall be maintained. Dipstick shall be made of wood without sharp tips. Means shall be provided not to allow dipstick to reach bottom of tank.

Capacity. The individual capacity of underground tanks is limited in respect to the lowest floor, basement or lot line as given in the following table:

| | Class I Gallons | Class II and III Gallons |
|--|--------------------|-----------------------------|
| If top of tank is above the lowest floor, basement or part of any building with a clearance of 10 feet or less | 550 | 50,000 |
| More than 10 feet | 551 to 2,000 | 50,001 to 75,000 |
| More than 20 feet | 2,001 to 5,000 | 75,001 to 100,000 |
| More than 25 feet | 5,001 to 15,000 | 100,001 to 150,000 |
| More than 30 feet | 15,001 to 20,000 | 150,001 to 200,000 |
| More than 40 feet | 20,001 to 50,000 | 200,001 to 500,000 |
| More than 50 feet | Unlimited | Unlimited |

Clearances on the side adjacent to a public street or alley may be waived.

The capacity of any tank containing flammable liquid of Class I shall not exceed 15,000 gallons in any filling station.

Distance from sewers, conduits and vaults shall be the same as outlined in the above table. When said sewer, conduits, or vault are below the top of the tank, the term "sewer" includes a line out of the said site; provided, however, these clearances shall not be

required from a sewer line out of said site if such sewer is constructed of cast iron with hot poured lead joints.

Abandonment or Removal of Underground Tanks. Underground tanks taken out of service shall be disposed of by any one of the three following means:

- (a) Being placed in "temporarily out of service" condition; provided, however, that no temporarily out of service tank shall be built upon;
- (b) Abandoned in place; or
- (c) Removed.

Tanks Rendered "Temporarily Out of Service." "Tanks rendered 'Temporarily Out of Service'" means flammable liquid storage tanks which are temporarily not being used for a period of time less than six months.

- (a) Remove all flammable liquid that can be pumped out with the service pump;
- (b) The fill line, gauge hatch and pump suction shall be capped and secured against tampering;
- (c) The vent line shall be left open.

Abandoning Underground Tanks in Place.

- (a) Remove all flammable liquid from tank and from all connecting lines;
- (b) The suction, inlet, gauge and vent lines shall be disconnected;
- (c) The tank shall be flooded with water, pumped out and then filled with an inert solid material;
- (d) Remove all connecting lines below ground level, and cap or plug all tank openings below ground level.

Removal of Underground Tanks.

- (a) Remove all flammable liquid from tank and connecting lines;
- (b) Disconnect the suction, inlet, gauge and vent lines;

(c) The tank shall be flushed with water and cleaned until rendered gas-free as indicated by combustible gas indicator;

(d) If a tank is to be disposed of as junk, it shall be retested for explosive vapors, and rendered gas-free. Before releasing to a junk dealer, a sufficient number of holes or openings shall be made at the bottom of the tank. The net cross-sectional area for such holes shall not be less than 78 square inches per tank;

(e) The tank shall be removed immediately from said site.

Prohibition of Abandonment of Aboveground Flammable Liquid Tanks.

(a) Abandoned aboveground flammable liquid tanks shall be removed. The tank shall be flushed with water and cleaned until rendered gas-free as indicated by a combustible gas indicator.

(b) The tank shall be dismantled and junked. If in one piece before releasing to a junk dealer, a sufficient number of holes or openings shall be made in the tank. The net cross-sectional area for such holes shall not be less than 78 square inches per tank. (Prior code § 129.1-22)

15-24-290 Tank testings.

All flammable liquid tanks in use may be tested in accordance with Section 15-24-280 whenever the bureau of fire prevention deems necessary. (Prior code § 129.1-22.1)

15-24-300 Railroad tank car storage prohibited.

Railroad tank cars shall not be used for aboveground storage tanks. (Prior code § 129.1-22.2)

Article III. Closed Container Storage

15-24-310 General requirements.

Storage in Containers. The storage of flammable liquids within buildings shall be as given in this paragraph; provided, however, that in a special room for flammable liquids, unlimited quantities of Class II or III flammable liquids may be stored therein as provided in Section 15-24-410 of this code.

(a) In Buildings of Type IVA or IVB Construction. Class I or II liquids, in sealed containers of safety cans of not more than one gallon capacity, not exceeding a total of five gallons. Class III liquids, maximum limit of any tank or container, 60 gallons to a maximum aggregate amount of 60 gallons except as otherwise permitted in Sections 15-24-170, 15-24-270 and 15-24-280 of this code.

(b) In Other Buildings. Class I liquids, in sealed containers or safety cans not more than one gallon capacity, not exceeding a total of 10 gallons. Class II liquids in sealed containers or safety cans of not more than five gallons capacity or in barrels, drums or tanks not more than 60 gallons capacity, to a maximum aggregate amount of 60 gallons. Class III liquids in sealed containers of not more than five gallons capacity, in barrels, drums and tanks not exceeding 120 gallons capacity to a maximum aggregate amount of 120 gallons, except as otherwise permitted in Sections 15-24-170, 15-24-270 and 15-24-280 of this code.

(c) Whenever the amount of flammable liquid stored in a building exceeds the limits in subitems (a) or (b) given above, the excess flammable liquid shall be stored in a special room for flammable liquids.

(d) Paint and Lettering. Portable containers of a capacity of 10 gallons or less, used for storing Class I flammable liquids, shall be painted red, or shall be

painted with a conspicuous band or stripe of red. Such containers shall be conspicuously lettered in black with the following words: "Dangerous — Keep Lights and Fires Away." Portable containers, used for storing Class III flammable liquids shall be painted blue, or shall be painted with a conspicuous band or stripe of blue. Such containers shall be conspicuously lettered in white with the following words: "Dangerous — Keep Light and Fire Away."

Storage Cabinets. Where the total quantity of flammable liquids stored is more than 10 gallons and less than 50 gallons, and no individual container exceeds five gallons capacity, storage cabinets constructed as follows shall be required: bottom, top and sides of cabinet shall be made of sheet iron, not less than No. 18 gauge in thickness. Said cabinet shall be double walled, with not less than one and one-half inches air space. Joints shall be riveted or welded. Doors shall be of a construction equivalent to walls and shall be provided with a three-joint lock. Door sill shall be raised not less than two inches above the bottom of the cabinet. The cabinet shall be conspicuously labeled in red letters: "Flammable — Keep Fire Away." (Prior code § 129.1-23)

15-24-320 Inspections.

All containers, tanks and other equipment used for the storage or use of flammable liquids and all buildings and premises wherein the same are stored or used shall be constructed and maintained in accordance with the provisions of this chapter.

Every container or tank for flammable liquids of a capacity of 60 gallons or more, either aboveground or within a building, and the premises and equipment used for the storage or handling of flammable liquids by any person subject to license under this chapter, shall be inspected by the division marshal in charge of fire prevention or his duly authorized representative at least once each year. (Prior code § 129.1-24)

15-24-330 Labels on products for sale.

All flammable liquids, flammable liquid compounds or flammable liquid mixtures, offered for sale at retail in containers shall be conspicuously marked or labeled "flammable" in easily legible type, which is in contrast by typography, layout or color with any other printed matter on the label. Labels shall not be required on beverages, articles of food or drugs, when the container is labeled in accordance with the regulations of the Interstate